Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-7. (Cancelled)

8. (Currently amended) ~~A~~ An isolated polynucleotide sequence encoding a polypeptide comprising an ~~anti-CEA~~ anti-carcinoembryonic antigen (anti-CEA) antibody ("806.077 Ab") comprising complementarity determining regions (CDRs) in which the CDRs comprise the following sequences:

a) heavy chain

CDR1 DNYMH (SEQ ID NO: 29)

CDR2 WIDPENGDTE YAPKFRG (SEQ ID NO: 31)

CDR3 LIYAGYLAMD Y(SEQ ID NO: 32); and

b) light chain

CDR1 SASSSVTYMH (SEQ ID NO: 26)

CDR2 STSNLAS (SEQ ID NO: 27)

CDR3 QQRSTYPLT (SEQ ID NO: 28)

9. (Currently amended) A vector comprising a polynucleotide as defined in claim 8, 20, 21, ~~or~~ 22, 23 or 24.

10. (Currently amended) A host cell transformed with a polynucleotide sequence as defined in claim 8 ~~or a transgenic non-human animal or transgenic plant developed from the host cell~~.

11-13. (Cancelled)

14. (Withdrawn) A method of making an antibody as defined in claim 8 which comprises:

subjecting a transgenic non-human mammal or a transgenic plant as defined in claim 10 to conditions conducive to expression of the antibody.

15. (Cancelled)

16. (Previously presented) A polynucleotide sequence encoding a polypeptide comprising an antibody conjugate comprising an antibody as defined in claim 8 and an effector moiety.

17. (Previously presented) A vector comprising a polynucleotide sequence as defined in claim 16.

18. (Currently amended) A host cell transformed with a polynucleotide sequence as defined in claim 16 ~~or a transgenic non-human animal or transgenic plant developed from the host cell~~.

19. (Previously presented) A method of making a conjugate as defined in claim 16, which comprises:

subjecting a host cell, a transgenic non-human mammal or a transgenic plant as defined in claim 18 to conditions conducive to expression of the antibody conjugate.

20. (Previously presented) A polynucleotide sequence encoding a polypeptide comprising an antibody as defined in claim 8, wherein the heavy chain CDRs 1 and 3 are further defined as:

CDR1 FNIKDNYMH (SEQ ID NO: 30); and

CDR3 HVLIYAGYLA MDY (SEQ ID NO: 33).

21. (Currently amended) A polynucleotide sequence encoding a polypeptide comprising an antibody as defined in claim 8, said antibody comprising the following~~, optionally humanized,~~ structure:

a heavy chain variable region sequence (SEQ ID NO:11)

EVQLQQSGAE LVRSGASVKL SCTASGFNIK DNYMHWVKQR 40

PEQGLEWIAW IDPENGDTEY APKFRGKATL TADSSSNTAY 80

LHLSSLTSED TAVYYCHVLI YAGYLAMDYW GQGTSVAVSS 120

and

a light chain variable region sequence (SEQ ID NO:9)

DIELTQSPAI MSASPGEKVT ITCSASSSVT YMHWFQQKPG 40

TSPKLWIYST SNLASGVPAR FSGSGSGTSY SLTISRMEAE 80

DAATYYCQQR STYPLTFGAG TKLELKRA 108

22. (Currently amended) A polynucleotide sequence encoding a polypeptide comprising a humanized antibody as defined in claim ~~21~~, 23 said antibody comprising at least one of the following sequences:

a heavy chain variable region sequence which is VH1 (SEQ ID NO:55);

a light chain variable region sequence which is VK4 (SEQ ID NO:71);

a human CH1 heavy chain IgG3 constant region;

a human kappa light chain CL region; and

a human IgG3 hinge region.~~;~~

~~optionally in the form of a f(ab')$_2$ fragment.~~

23. (New) The polynucleotides sequence of claim 21, wherein said antibody is a humanized antibody.

24. (New) The polynucleotide sequence of claim 22, wherein said antibody is in the form of an f(ab')$_2$ fragment.